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STUDIES IN THE RHAMNACEAE—I: *SMYTHEA VELUTINA* (RIDL.) S. P. BAN. & P. K. MUKH. COMB. NOV. AND DESCRIPTION OF A NEW VARIETY UNDER IT

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ABSTRACT

In connection with our studies in the Ventilagineae (Rhamnaceae), we have found it necessary to make a new combination, *Smythea velutina* and to describe a new variety under it: *S. velutina* var. *kingiana.*

Latin diagnosis with illustrations for the new variety are appended.

INTRODUCTION

G. King (1896) quoted under his *Smythea macrocarpa* Hemsl. var. *pubescens* King, two specimens (*i*) Perak, *Scortechini* 2110 and (*ii*) *King's Collector* 7726. H. N. Ridley (1922) established the species *Ventilago velutina* based on an unnumbered Scortechinian sheet from Perak. Examination of the materials cited above revealed that there is little difference between the Scortechinian numbered (2110) and unnumbered sheets and that there is little justification for treating the taxa as distinct on the basis of these materials. So they are merged here resulting in the new combination.

Smythea velutina (Ridl.) S. P. Ban. & P. K. Mukh.

The transference of the taxon to the genus *Smythea* Seem. ex A. Gray, is warranted by the nature of the fruit which is capsular, bivalved, compressed, with appendage opposite the lower portion not distinctly set off, instead of being samaroid and the long winged appendage opposite the lower globose portion distinctly set off, characterising *Ventilago* Gaertn. (*Suessenguth,* 1953).

Characters like the velutinous branches, petioles and under surface of leaves, the oblong-lanceolate to oblong-elliptic puberulous fruits, borne on branches with smaller leaves, distinguish our plant from *S. macrocarpa* Hemsl. and appear worthy of specific rank.

Examination of the materials quoted by King (*loc. cit.*) under *S. macrocarpa* var. *pubescens* reveals that they are a heterogenous assemblage and can reasonably be separated thus: (i) Perak, *Scortechini* 2110, being merged with *S. velutina* and (ii) *King's Collector* 7726 is treated here as a distinct variety *S. velutina* var. *kingiana* S. P. Ban. et P. K. Mukh. The sheet, *Scortechini* 2110, is here chosen as Lectotype for var. *velutina.* Synonymy for the taxa treated here are given below:

Smythea velutina (Ridl.) S. P. Ban. et P. K. Mukh. comb. nov. var. **velutina.** *Ventilago velutina* Ridl. Fl. Mal. Penin. 1: 467, 1922; Narayanaswami in Journ. Asiat. Soc. Bengal n. s. 27: 356, 1931; Suessenguth in Pflanzenfam. ed. 2, 20d: 153, 1953.

Typus: Perak, *Scortechini* s. n., Acc. no. 87930 (CAL).

Smythea macrocarpa Hemsl. var. *pubescens* King in Journ. Asiat. Soc. Bengal 65: 382, 1896, *pro parte.* *Lectotypus:* Perak, *Scortechini* 2110 (CAL).

Smythea velutina (Ridl.) S. P. Ban. et P. K. Mukh. var. **kingiana** S. P. Ban. et P. K. Mukh. var. nov.

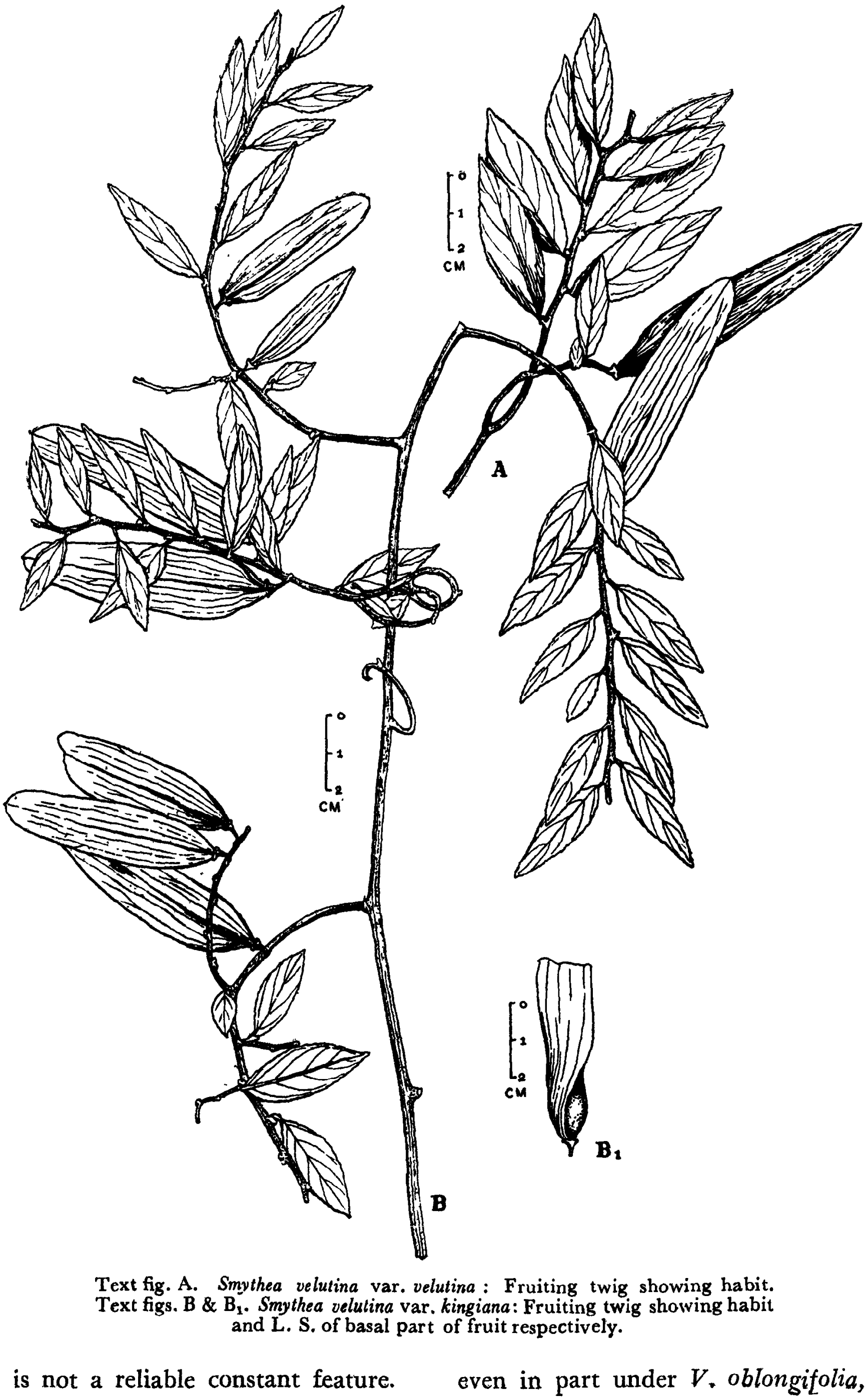
A var. *velutina* distingui potest capsula chartacea villosa, pallidefusca, elliptico-oblonga apice rotundo in mucornem desinente.

Typus: Larut, Perak, 244-305 m, in fructu junio 1885, *King's Collector* 7726, positus in *CAL.*

var. *kingiana* can be differentiated from var. *velutina* by the chartaceous, villous, dull-brown, elliptic-oblong capsule with rounded apex, ending in an abrupt mucro. The differences in fruit between the two taxa are tabulated below:

S. velutina var. *velutina*	*S. velutina* var. *kingiana*
(i) 6.7-8 × 1.3-1.8 cm	(i) 5.4-6.5 × 1.6-2 cm
(ii) Coriaceous, puberulous, glaucous-brown	(ii) Chartaceous, villous, dull-brown
(iii) Oblong-lanceolate, tapering into a short thickish acumen	(iii) Ovate-elliptic - oblong, apex rounded with an abrupt mucro

Ridley (1917) considered *Smythea macrocarpa* var. *pubescens* King synonymous with *Ventilago oblongifolia* Bl. Later (1922) he took *Smythea macrocarpa* var. *pubescens* in two parts, one part included under *V. oblongifolia* and the other under his *V. velutina.* Narayanaswami (1931) agreed with the first proposal of Ridley. Ridley quoted no sheet mentioned by King, while ascribing King's var. *pubescens pro parte* under *V. oblongifolia.* Narayanaswami gave undue importance to the "oblique leaf base" which is not a reliable constant feature. We find no reason to put King's var. *pubescens,* even in part under *V. oblongifolia,* as we see that it is quite a distinct one.



Text fig. A. *Smythea velutina* var. *velutina* : Fruiting twig showing habit. Text figs. B & B_1. *Smythea velutina* var. *kingiana*: Fruiting twig showing habit and L. S. of basal part of fruit respectively.

The main difference between *Ventilago* and *Smythea* are remarkably based on a single character viz. the fruits, as mentioned above, and when fruiting materials are available there should be no confusion in placing the different taxa under their respective genera.

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